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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,284	01/14/2002	Horst Udo Petersen	630-24US	5432
23716	7590	04/20/2004	EXAMINER	
ANTHONY ASQUITH 28-461 COLUMBIA STREET WEST WATERLOO, ON N2T 2P5 CANADA			COZART, JERMIE E	
			ART UNIT	PAPER NUMBER
			3726	//

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,284

Applicant(s)

PETERSEN, HORST UDO

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7, 10-12 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/518,207.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Note

1. The indicated allowability of claims 10 and 14-17 is withdrawn in view of the reference(s) to Loper and JP 5-123783. Rejections based on the cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-4, 7, 11, 12, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudash et al. (5,769,499) in view of Loper et al. (3,286,539).

Dudash (*at column 4, lines 1-16 and Figures 7-8*) discloses all of the claimed subject matter except for providing a die-set, which includes an upper punch and a lower punch, and arranging the subassembly in the die set, with the headrest-tube vertical; pressing the headrest-tube vertically, in the die set, with a lower-tube-collapsing force; pressing the headrest-tube vertically with a lower tube collapsing force; pressing the upper and lower shoulders together with a shoulder coining force; pressing the upper and lower ring beads together with a ring bead coining force; arranging the upper punch and lower punches to apply the lower tube collapsing force to the headrest tube between the lower end-abutment and the upper shoulder; arranging the die-set such that the upper and lower punches do not bottom together while the shoulder-coining force/ring bead

coining force is being applied, thereby enabling the force of the press to be available as the shoulder-coining force/ring bead coining force; applying the shoulder coining force/ring bead coining force at sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together, onto the two sides of the seat frame piece, whereby the seat frame piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the headrest tube; or the shoulder coining force/ring bead coining force being much greater than the lower tube collapsing force.

Loper discloses providing a die-set which includes an upper punch (20) and a lower punch (15), and arranging a subassembly (10, 13) in the die set, with the tube (13) oriented vertical, pressing the tube (13) vertically in the die set with a lower-tube-collapsing force. Loper also discloses pressing the upper and lower shoulders/upper and lower ring beads (14, 19) together with a shoulder coining force/ring bead coining force, wherein the shoulder coining force/ring bead coining force is of sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together onto the two sides of the piece whereby the piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the tube. Loper also discloses arranging the upper punch and lower punch (22, 15) to apply the lower tube collapsing force to the tube (13) between a lower end-abutment (bottom portion of tube located in the recess of member 15, see Fig. 4) and the upper shoulder (19). Loper also discloses arranging the die-set such that the upper and lower punches do not bottom together (see Fig. 4) while the shoulder-coining force/ring bead coining force is being applied, thereby enabling the force of the press to be available as the shoulder-coining force/ring

bead coining force. The shoulder coining force/ring bead coining force is much larger than the lower tube collapsing force. See column 1, line 56 – column 2, line 39, and Figures 2-4 for further clarification.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a die-set for the assembling the subassembly (e.g. the headrest-tube and seatframe-piece) of Dudash, wherein the die-set includes an upper punch and a lower punch, to arrange the subassembly in the die set with the headrest-tube vertical, to press the headrest-tube vertically in the die set with a lower-tube-collapsing force, to press the upper and lower shoulders together with a shoulder coining force, to press the upper and lower ring beads together with a ring bead coining force, to arrange the upper punch and lower punches to apply the lower-tube-collapsing-force to the headrest-tube between the lower end-abutment and the upper shoulder, to arrange the die-set such that the upper and lower punches do not bottom together while the shoulder-coining force/ring bead coining force is being applied, thereby enabling the force of the press to be available as the shoulder-coining force/ring bead coining force, to apply the shoulder coining force/ring bead coining force at sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together, onto the two sides of the seat frame piece, whereby the seat frame piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the headrest tube, and wherein the shoulder coining force/ring bead coining force is much greater than the lower tube collapsing force, in light of the teachings of Loper, in

order to provide the necessary swaging means to effectively swage the head rest tube of Dudash to the seat frame.

4. Claims 2, 10, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dudash et al. (5,769,499) in view of JP 5-123783.

Dudash (*at column 4, lines 1-15 and Figures 7-8*) discloses all of the claimed subject matter except for providing a die-set, which includes an upper punch and a lower punch, and arranging the subassembly in the die set, with the headrest-tube vertical; pressing the headrest-tube vertically, in the die set, with a lower-tube-collapsing force; pressing the headrest-tube vertically with a lower tube collapsing force; pressing the upper and lower shoulders together with a shoulder coining force; pressing the upper and lower ring beads together with a ring bead coining force; arranging the upper punch and lower punches to apply the lower tube collapsing force to the headrest tube between the lower end-abutment and the upper shoulder; arranging the die-set such that the upper and lower punches do not bottom together while the shoulder coining force/ring bead coining force is being applied, thereby enabling the force of the press to be available as the shoulder-coining force/ring bead coining force; applying the shoulder coining force/ring bead coining force at sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together, onto the two sides of the seat frame piece, whereby the seat frame piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the headrest tube; the shoulder coining force/ring bead coining force being much greater than the lower tube collapsing force; or arranging the die set so as

to form the upper and lower shoulders/upper and lower ring beads in the same press stroke.

JP 5-123783 discloses providing a die-set which includes an upper punch (8) and a lower punch (9), and arranging a subassembly (1, 2) in the die set, with the tube (1) oriented vertical, pressing the tube (1) vertically in the die set with a lower tube collapsing force. JP 5-123783 discloses pressing the upper and lower shoulders/upper and lower ring beads (1a, 1b) together with a shoulder coining force/ring bead coining force, wherein the shoulder coining force/ring bead coining force is of sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together onto the two sides of the piece whereby the piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the tube. JP 5-123783 also discloses arranging the upper punch and lower punch (8, 9) to apply the lower-tube-collapsing-force to the tube (1). JP 5-123783 also discloses arranging the die-set such that the upper and lower punches do not bottom together (see fig. 10) while the shoulder-coining force/ring bead coining force is being applied, thereby enabling the force of the press to be available as the shoulder-coining force/ring bead coining force. The shoulder coining force/ring bead coining force is much larger than the lower tube collapsing force, and arranging the die set so as to form the upper and lower shoulders/upper and lower ring beads (1a, 1b) in the same press stroke (see fig. 10). See abstract, and Figures 8-11 for further clarification.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a die-set for the assembling the subassembly (e.g. the

headrest-tube and seat frame-piece) of Dudash, wherein the die-set includes an upper punch and a lower punch, to arrange the subassembly in the die set with the headrest-tube vertical, to press the headrest-tube vertically in the die set with a lower-tube-collapsing force, to press the upper and lower shoulders together with a shoulder coining force, to press the upper and lower ring beads together with a ring bead coining force, to arrange the upper punch and lower punches to apply the lower-tube-collapsing-force to the headrest-tube between the lower end-abutment and the upper shoulder, to arrange the die-set such that the upper and lower punches do not bottom together while the shoulder coining force/ring bead coining force is being applied, thereby enabling the force of the press to be available as the shoulder coining force/ring bead coining force, to apply the shoulder coining force/ring bead coining force at sufficient magnitude to coin the upper and lower shoulders/upper and lower ring beads together, onto the two sides of the seat frame piece, whereby the seat frame piece becomes gripped between the upper and lower shoulders/upper and lower ring beads of the headrest tube, and wherein the shoulder coining force/ring bead coining force is much greater than the lower tube collapsing force, and to arrange the die set so as to form the upper and lower shoulders/upper and lower ring beads in the same press stroke, in light of the teachings of JP 5-123783, in order to provide the necessary swaging means to effectively swage the head rest tube of Dudash to the seat frame.

Allowable Subject Matter

5. Claims 5, 6, 8, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments, see pages 9-12, filed September 3, 2003, with respect to the rejection(s) of claim(s) 2-4, 7, 10, 11, and 12 under Dudash et al. in view of Leicht have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dudash et al. in view of Loper and Dudash et al. in view of JP 5-123783.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 703-305-0126. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

April 7, 2004



DAVID P. BRYANT
PRIMARY EXAMINER